This listing of claims will replace all prior versions, and listings, of claims in the application:

## **Listing of claims:**

1. (Currently Amended): A process for producing a compound of formula I:

wherein

 $R_1 \ is \ C_{1\text{--}12} \ alkyl, \ C_{2\text{--}12} \ alkenyl, \ C_{2\text{--}12} \ alkynyl, \ C_{6\text{--}12} \ aryl, \ C_{3\text{--}10} \ heterocycle, \ C_{6\text{--}12} \ aralkyl \ or \ C_{3\text{--}10} \ heteroaralkyl, \ and$ 

 $R_2$  is a hydroxyl protecting group CO-C<sub>1-6</sub> alkyl, CO-C<sub>6-12</sub> aryl, CO-C<sub>1-6</sub> alkoxy, CO-C<sub>6-12</sub> aryloxy, or CO-C<sub>6-12</sub> arylalkyl; said process comprising:

a) subjecting a compound of formula II:

to an enzymatic diastereomeric resolution in the presence of a suitable amount of Pig Liver Esterase enzyme or Porcine Pancreatic Lipase enzyme;

- b) recovering said compound of formula I.
- 2. (Original): The process according to claim 1, wherein  $R_1$  is  $C_{1-12}$  alkyl.

- 3. (Currently Amended): The process according to claim 1 wherein  $R_2$  is  $CO-C_{1-6}$  alkyl,  $CO-C_{6-12}$  aryl,  $CO-C_{1-6}$  alkoxy,  $CO-C_{6-12}$  aryloxy, or  $CO-C_{6-12}$  arylalkyl.
- 4. (Previously Presented): The process according to claim 1, wherein  $R_2$  is CO-C<sub>6-12</sub> aryl.
- 5. (Previously Presented): The process according to claim 1, wherein the enzyme is Pig Liver Esterase.
- 6. (Previously Presented): The process according to claim 1, wherein the enzyme is Porcine Pancreatic Lipase.
  - 7. (Currently Amended): The process according to claim 1, further comprising:
    a) replacing the functional group at position C4 of the compound of formula I to produce

a compound of formula V:

wherein B is purine or pyrimidine base or an analogue thereof;

- b) removing the group R<sub>2</sub> of said compound of formula V; and
- c) recovering a compound of formula VI:

or a pharmaceutically acceptable salt thereof.

8. (Previously Presented): The process according to claim 7, wherein

B is:

 $R_3$  is H,  $C_{1-6}$  alkyl,  $C_{1-6}$  acyl, or CO- $R_9$ ;

R<sub>9</sub> is H or C<sub>1-6</sub> alkyl;

 $R_4$  and  $R_5$  are each independently H,  $C_{1-6}$  alkyl, bromide, chloride, fluoride, iodide or  $CF_3$ ; and  $R_6$ ,  $R_7$  and  $R_8$  are each independently H, bromide, chloride, fluoride, iodide, amino, hydroxyl, or  $C_{3-6}$  cycloalkylamino.

9. (Previously Presented): The process according to claim 1, further comprising the step of recovering a compound of formula VII:

- 10. (Original): A process according to claim 1, wherein  $R_1$  is  $C_{1-12}$  alkyl and  $R_2$  is  $CO\text{-}C_{6\text{-}12}$  aryl.
- 11. (Original): A process according to claim 1, wherein  $R_1$  is methyl and  $R_2$  is benzoyl.

12. (Currently Amended): A process for producing a compound of formula III:

wherein

 $R_{11} \ is \ C_{1\text{-}12} \ alkyl, \ C_{2\text{-}12} \ alkenyl, \ C_{2\text{-}12} \ alkynyl, \ C_{6\text{-}12} \ aryl, \ C_{3\text{-}10} \ heterocycle, \ C_{6\text{-}12} \ aralkyl \ or \\ C_{3\text{-}10} \ heteroaralkyl; \ and$ 

 $R_{12}$  is a hydroxyl protecting group CO- $C_{1-6}$  alkyl, CO- $C_{6-12}$  aryl, CO- $C_{1-6}$  alkoxy, CO- $C_{6-12}$  aryloxy, or CO- $C_{6-12}$  arylalkyl,

said process comprising:

a) subjecting a compound of formula IV:

to an enzymatic diastereomeric resolution in the presence of a suitable amount of enzyme, wherein said enzyme is Candida Antarctica "A" lipase, Candida Antarctica "B" lipase, Candida Lypolitica Lipase, or Rhizomucor Miehei Lipase; and

- b) recovering said compound of formula III.
- 13. (Original): The process according to claim 12, wherein  $R_{11}$  is  $C_{1-12}$  alkyl.
- 14. (Currently Amended): The process according to claim 12, wherein  $R_{12}$  is CO- $C_{1-6}$  alkyl, CO- $C_{6-12}$  aryloxy, or CO- $C_{6-12}$  arylalkyl.

- 15. (Original): The process according to claim 12, wherein  $R_{12}$  is CO- $C_{6-12}$  aryl.
- 16. (Original): The process according to claim 12, wherein the enzyme is Candida Antarctica "A" lipase.
- 17. (Original): The process according to claim 12, wherein the enzyme is Candida Antarctica "B" lipase.
- 18. (Original): The process according to claim 12, wherein the enzyme is Candida Lypolitica Lipase.
- 19. (Original): The process according to claim 12, wherein the enzyme is Rhizomucor Miehei Lipase.
  - 20. (Previously Presented): The process according to claim 12, further comprising:
- a) replacing the functional group at position C4 of the compound of formula III to produce a compound of formula VIII:

wherein B is purine or pyrimidine base or an analogue thereof;

- b) removing group  $R_{12}$  of said compound of formula VIII;
- c) recovering a compound of formula IX:

or a pharmaceutically acceptable salt thereof.

21. (Previously Presented): The process according to claim 20, wherein

B is

 $R_3$  is H,  $C_{1-6}$  alkyl,  $C_{1-6}$  acyl and CO- $R_9$ ;

R<sub>9</sub> is H or C<sub>1-6</sub> alkyl;

 $R_4$  and  $R_5$  are each independently H,  $C_{1-6}$  alkyl, bromide, chloride, fluoride, iodide or  $CF_3$ ; and  $R_6$ ,  $R_7$  and  $R_8$  are each independently H, bromide, chloride, fluoride, iodide, amino, hydroxyl or  $C_{3-6}$  cycloalkylamino.

22. (Currently Amended): The process according to claim <u>20</u> <del>12</del>, further comprising converting said compound of formula III to a compound of formula IV and recovering said compound of formula X:

23. (Original): A process according to claim 12, wherein  $R_{11}$  is  $C_{1-12}$  alkyl and  $R_{12}$  is  $CO-C_{6-12}$  aryl.

24. (Original): A process according to claim 12, wherein  $R_{11}$  is methyl and  $R_{12}$  is benzoyl.